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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/672,458

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Timo Tokkonen

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EXAMINER

LONG, ANDREA NATAE

ART UNIT

PAPER NUMBER

2175

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/672,458	Applicant(s) TOKKONEN, TIMO	
	Examiner ANDREA LONG	Art Unit 2175	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,6,7,10-12,16,17,19,20,22 and 23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6,7,10-12,16,17,19,20,22 and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/22/2010 has been entered.

Applicant's Response

2. In Applicant's Response dated 11/22/2010, Applicant amended claims 1, 6, 11, 16, 17, 19, 20, 22, and 23, and argued against all objections and rejections previously set forth in the Office Action dated 07/20/2010.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-3, 6, 7, 10-12, 16, 17, 19, 20, 22, and 23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the

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inventor(s), at the time the application was filed, had possession of the claimed invention.

The above listed claims disclose “automatically determining from an identity of the separate information unit whether an input entry is for the device to perform a wireless communication or for the device to be used as a **guiding agent to teach a user of the device**”.

The specification disclose the guiding agent as an advantage or result of the system, while the claims disclose it as a separate function recognized as a result of information entered. It appears that the specification is teaching the guiding agent to be the concept of enlarging or decreasing the size of input units based on probability regardless of the mode in which the system is operating in (i.e. wireless communication or menu mode).

It the Examiner has overlooked the portion of the specification where the guiding agent is not used just to predict which keys are likely to be selected which is the same function of the wireless communication function, the Applicant should point it out in response to the Office Action.

Claims 2, 3, 7, 10, 12, 16, 17, 19, 20, 22 and 23 are rejected as inheriting the deficiencies of independent claims 1, 6, and 11 respectively.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 6, 7, 10-12, 16, 17, 19, 20, 22, and 23 rejected under 35 U.S.C.

103(a) as being unpatentable over Shimada et al (US Patent 7136047 B2),

hereinafter “Shimada” in view of Comerford et al (US Patent 5963671), hereinafter “Comerford”.

As to independent claim 1, Shimada teaches a method comprising:

receiving a separate information unit entered with an input element of a dynamic input/output arrangement belonging to a user interface of an electronic device (column 6 line 22-23 – input area keys);

automatically determining from an identity of the separate information unit whether an input entry is for performing a first function (Fig. 4D – entering numbers) by the device or for performing a second function by the device (Fig. 4C - entering English alphabets),

wherein when it is determined that the input entry is for performing the first function by the device, increasing in an equal amount a size of input elements of which at least one is a subsequent input element needed for performing the first function by the device (Fig. 4D,—column 6 lines 24-27); and

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when it is determined that the input entry is for performing the second function (entering English alphabets) by the device, determining which particular information unit should be input next for performing the second function (English alphabets correspond to the input entry); and emphasizing by size the input element corresponding to the particular information unit which should be entered next in the user interface of the electronic device (Fig. 4C – displaying the English alphabets). It is noted that Shimada teaches wherein larger buttons makes selection by finger easier and more accurate, increasing user convenience (column 2 lines 64-66). Shimada does not teach explicitly teach the device to perform a wireless communication or the device to be used as a guiding agent to teach a user of the device, decreasing in size, from a size of an initial state, at least an area displayed on the device not needed for performing the first function by the device or wherein the sizes of the emphasized input elements vary on a case-specific basis depending on respective probabilities of the information units associated with the input elements.

The Examiner is taking Official Notice that one skilled in the art it well aware of the basic and primary function of a cell phone which is to make a phone call (wireless communication). Shimada does teach wherein the device can be a cell phone (column 4 lines 3-5, 54-60). It is reasonable for one skilled in the art to incorporate the device to perform a wireless communication in view of Shimada having a numerical input mode and the general knowledge/use of a cell phone.

Comerford teaches decreasing in size, at least an area (input unit) displayed on the device not needed for performing the first function by the device (Fig. 2, the input

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elements are decreased in size relative to the enlarged input elements). Comerford also teaches when the device is used as a guiding agent to teach the user of the device (predictive text) wherein the sizes of the emphasized input elements vary on a case-specific basis depending on respective probabilities of the information units associated with the input elements (column 3 lines 64-67 “degree of emphasis”, column 13 lines 1-9). The Examiner would like to note that the input elements not needed are displayed to appear smaller than the needed input elements and with the availability of emphasizing input elements to different sizes provide one skilled in the art of programming to reasonably be able to decrease the size of the input elements from a size of an initial state to further emphasize the input elements that are needed for selection.

It would have been obvious to one skilled in the art to have combined the teachings to Shimada with Comerford to increase the facilitation of faster and more efficient selection of keys.

As to dependent claim 2, Shimada teaches wherein the input of the information unit is fulfilled by a press of a separate key belonging to the user interface (column 6 lines 22-23 – input area keys).

As to dependent claim 3, Shimada teaches wherein the dynamic input/output arrangement comprises a touch display or a projection keyboard (column 5 lines 8-11).

As to independent claim 6, claim 6 recites substantially similar subject matter as that of claim 1, and in further view of the following is rejected under the same rationale:

Shimada teaches an electronic device comprising: at least one processor (Fig. 1); and at least one memory including computer program code, where the at least one memory and the computer program code are configured, with the at least one processor, to cause the electronic device to at least (Fig. 1 column 4 lines 25-54): save information (memory); display a plurality of input elements, each of the input elements corresponding to an information unit (column 6 line 22-23 – input area keys).

As to dependent claim 7, Shimada teaches where the input elements are defined by an area on a touch display or a projection keyboard (Fig. 3, column 5 lines 8-11).

As to dependent claim 10, Shimada teaches further comprising a cellular terminal or PDA (column 4 lines 5-6).

As to independent claim 11, claim 11, recites substantially similar subject matter as that of claim 1 and is rejected under the same reasoning.

As to dependent claim 12, Shimada teaches where said input of the information unit in the electronic device is fulfilled by a separate key press in a user interface (column 6 lines 22-23 – input area keys).

As to dependent claims 16, 19, and 22, Shimada teaches based upon a particular function of the device to be performed, changing a function and descriptive text of at least one of the input elements to a descriptive text of at least one soft key of the user interface to be associated with a most probable function to perform the particular function (Figs. 4C and 4D – based on the function the input elements display descriptive text such as the alphabet or number in the input element and will function according to the information displayed).

As to dependent claim 17, 20, and 23, Shimada teaches wherein the user interface of the device is a touch display (column 4 lines 10-11) and wherein the touch display is in one of a standby mode (normal display) or an idle state when the separate information unit is entered (column 2 lines 45-55).

Response to Arguments

7. Applicant's arguments filed 11/22/2010 have been fully considered but they are not persuasive.

On page 4 of Applicant's remarks, Applicant asserts that the references fail to teach automatically determining from an identity of the separate information unit whether an input entry is for the device to perform a wireless communication or for the device to be used as a guiding agent to teach a user of the device.

The Examiner disagrees.

Shimada disclose a device such as a cell phone that determines based on a selection in an input area which function (numeral entry or text entry) the user wants to operate in and displays the corresponding functional selections to the user. One skilled in the art is well aware of the basic and primary function of cell phone which is to make a phone call (wireless communication). It is reasonable for one skilled in the art to incorporate the device to perform a wireless communication in view of Shimada having a numerical input mode and the general knowledge/use of a cell phone.

With regards to the guiding agent to teach a user of the device, please note the 35 U.S.C. 112 discussion above. The guiding agent to teach a user of the device as disclosed in the specification refers to the method of enlarging inputs that are to be most likely selected (predictive text). Predictive text can be found in the teachings of Shimada but more prominent in the disclosure of Comerford.

On page 6 of Applicant's remarks, Applicant asserts that the references fail to teach "changing a function and a descriptive text of at least one soft key of the user interface to be associated with a most probable function to perform the particular function" or "wherein the user interface of the device is a touch display and wherein the

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touch display is in one of a standby mode or an idle state when the separate information unit is entered”..

The Examiner disagrees.

Shimada teaches when a user selects a first area (numerical entry or text entry) the corresponding characters will be displayed. Therefore based on the function (numerical entry or text entry) the soft keys will display the corresponding characters (numbers or text) and will function accordingly (entering numbers or text). Shimada also teaches having a primary screen which consists of two primary areas for which the user interact with.

Conclusion

8. The prior art made of record on PTO 892 and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrea N. Long whose telephone number is 571-270-1055. The examiner can normally be reached on Mon - Thurs 6:00 am to 3:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Bashore can be reached on 571-272-4088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ANL
Examiner 2175

/ADAM M QUELER/
Primary Examiner, Art Unit 2177